

Notes

Notes on Maryland No. 10: Three New Butterfly Records for the State of Maryland

Three new butterfly species have been recorded for the state of Maryland as follows:

1. *Atrytone palatka* (Skipper), August 7, 1980, near Bucktown, Worcester County, Maryland.

The specimen was a worn male. It was collected near the town of Bucktown, on DeCourseys Road. The specimen was found in a sedge-like area which is typical of the habitat where we collect *Atrytone dion alabamae* Lindsey. The specimen was resting on one of the sedges. This area was further thoroughly investigated without success for other specimens. Along with the *A. palatka* were flying *A. d. alabamae*.

2. *Lycaena epixanthe* (Bog Copper), July 19, 1981, Garrett County, near Cherry Creek, near Bittinger.

For many years Robert Simmons has been seeking the Bog Copper, *Lycaena epixanthe* Boisduval and Leconte, in the cranberry bogs of western Maryland without success. On July 19, 1981, William A. Andersen and Philip Kean made a joint field trip to the mountains of western Maryland. North of Bittinger, Garrett County, they discovered a cranberry bog near Cherry Creek. Upon investigation of the cranberry plants, eight Bog Coppers were collected. This is the first record of the species in Maryland. The butterfly will undoubtedly be found in other cranberry bogs in Garrett County.

3. *Ascia monuste* (Great Southern White), September 3, 1980, near Newbridge, Worcester County, Maryland.

Bill Grooms and John Fales made a joint field trip to the Maryland eastern shore on September 3, 1980. Near Newbridge, Bill Grooms pulled his usual collecting stunt by netting a new species for the state of Maryland. Bill observed the specimen zig-zagging down the road and cruising off the road on both sides attempting to find a place to perch. The butterfly selected a large, fresh green leaf to alight and rest upon. Bill approached the specimen very carefully so as not to excite it. As he approached the specimen, he realized it was a worn male of the Great Southern White, *Ascia monuste* Linnaeus. Realizing this was a new species record for Maryland, he carefully secured the specimen. In his usual kind way he gave the specimen to John Fales for his Maryland studies of Lepidoptera.

We would like to thank Bill Grooms and John Fales for permission to report their records. A detailed citation of other Maryland records is given in the recent paper by Simmons and Andersen, 1978(1980), Notes on Maryland Lepidoptera No. 9: Seven new butterfly records for the state of Maryland. J. Res. Lep. 17(4): 257-259.

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Further Notes Regarding *Colias hecla* Lefebvre (Lepidoptera: Pieridae) at Churchill Manitoba

Ferris' recent comments concerning the occurrence of *Colias hecla* at Churchill Manitoba (J. Res. Lepid. 20(1):50-54, 1981(82)) are well taken. However, some additional information may be of interest to Ferris and other readers.

Since the 1974 season I have spent four additional seasons at Churchill conducting systematic studies of the butterfly populations in the Churchill region. With help from college students from the Churchill Northern Studies Center and others, population centers were mapped, and ecological and behavioral data recorded. This study covered additional areas not visited by Parshall and Oosting in 1974 or Ferris in 1973. The results of the study will be reported in a second paper now in preparation. With regard to the occurrence of *C. hecla* within the taiga areas, the following notes may present a clearer picture.

During the entire study only 35 adults were recorded. The year 1977 was by far its best with the author collecting 12 adults and fellow researchers together collecting an equal number, the greatest number ever recorded for any single season at Churchill.

C. hecla was always observed in association with tundra communities. It was never recorded closer than ± 75 meters to a forest-tundra ecotone. The species' ovipositing choices at Churchill are found in a few locations within the open-spruce forest ecotone referred to as "taiga" by some researchers. The open-spruce forest ecotone is really a mixture of both tundra and forest communities. Ferris' taiga reference may therefore be considered a tundra observation. Such biotope classification may help to clear the picture a little; in any case, Ferris' observations must be regarded as unique and not a data base for a theory for a taiga population of eastern *C. hecla*. Other researchers in the Eastern Arctic should systematically record flight patterns of *C. hecla* in their areas.

This author, as Ferris, has also collected *hecla* in the Western Arctic and the High Eastern Arctic. The Churchill population of *C. hecla* is more closely related to eastern populations than it is to western populations in terms of ecology, behavior, and total biology. Thus great caution should be exercised when eastern and western populations are compared, for the Western Arctic populations appear to represent a less stable genetic entity. Many factors may be altering the biology of the species in the Western Arctic. The possibility of sibling species within the *Colias* complex is just one of the several matters requiring careful research.

I look forward to reading Ferris' revision and hope that it will reflect careful biological research which will help answer some problems that exist with *hecla*. A literature review based on pinned specimens and the author's opinion will be of interest, but not nearly as useful as any biological insights.

I would like to suggest that terms such as *taiga*, *climax* and *sub-climax*, be dropped from use by lepidopterists when referring to Arctic and Sub-arctic biotopes. These terms do not reflect what is currently known about botanical communities in the arctic ecosystem. Besides not representing current ecological thought, the terms have a far too general meaning and do not help clarify a multi-dimensional research approach.

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